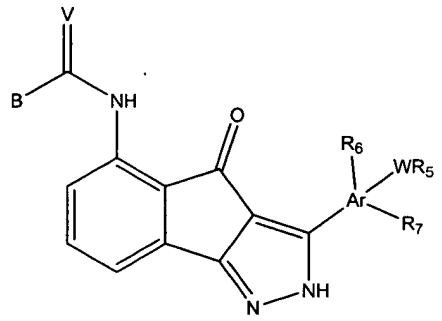
Claims:

1. A compound, or an isomeric, prodrug, tautomeric, pharmaceutically acceptable salt, N-oxide, or stereoisomeric form thereof, having a structure of Formula II:



wherein

B represents M_nR_8;

Ar represents an aryl or heteroaryl ring;

V represents O, S, or N-CN;

W represents O, S, or NR'';

R' represents, independently for each occurrence, H, lower alkyl, or a metal counterion;

R'' represents, independently for each occurrence, H or lower alkyl;

R_5 represents H, $P(=O)(OR')_2$, or M_nQ;

R_6 represents H, OH, or M_nQ, provided that only one of R_5 and R_6 represents H;

R_7 represents H, halogen, hydroxyl, lower alkyl or lower alkoxyl;

R_8 represents substituted or unsubstituted alkyl, alkenyl, alkynyl, alkoxy, aryl, heteroaryl, cyclo-alkyl, heterocyclyl, or amine;

M, independently for each occurrence, represents a substituted or unsubstituted methylene group (including C(=O) and C(=S)), NR'', O, S, S(O), or $S(O_2)$;

n represents an integer from 1-4 when present in B, from 0-6 when present in R_5, and from 1-3 when present in R_6; and

Q represents a substituted or unsubstituted: tertiary amino substituent, or nitrogen-containing heterocycle.

2. A compound of claim 1, wherein R_8 represents substituted or unsubstituted morpholino, piperazinyl, or cyclohexyl.

3. A compound of claim 1, wherein R'' represents H.

4. A compound of claim 1, wherein R_5 represents M_nQ.

5. A compound of claim 4, wherein the occurrence of M attached to Q represents CH_2, $S(O_2)$, C(=S), or C(=O).

6. A compound of claim 5, wherein the occurrence of M attached to Q represents CH_2.

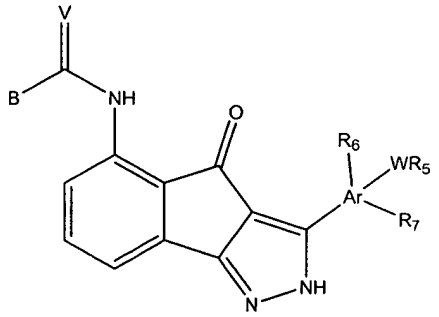
7. A compound of claim 5, wherein the occurrence of M attached to Q is C(=O).

8. A compound of claim 4, wherein the occurrence of M attached to Q represents substituted NR''.

9. A compound of claim 4, wherein Q represents a substituted or unsubstituted nitrogen-containing heterocycle.

10. A compound of claim 4, wherein Q represents a substituted or unsubstituted tertiary amino group.

11. A compound, or an isomeric, prodrug, tautomeric, pharmaceutically acceptable salt, N-oxide, or stereoisomeric form thereof, having a structure of Formula II:



wherein

B represents M_nR_8;

Ar represents an aryl or heteroaryl ring;

V represents O, S, or N-CN;

W represents O, S, or NR'';

R' represents, independently for each occurrence, H, lower alkyl, or a metal counterion;

R'' represents, independently for each occurrence, H or lower alkyl;

R''' represents H or optionally substituted lower alkyl;

R_5 represents M_nJK;

R_6 represents H, OH, or M_nQ;

R_7 represents H, halogen, hydroxyl, lower alkyl or lower alkoxyl;

R_8 represents substituted or unsubstituted alkyl, alkenyl, alkynyl, alkoxy, aryl, heteroaryl, cyclo-alkyl, heterocyclyl, or amine;

J represents C(=O), C(=S), or SO_2;

K represents OR', NR'', or $N(R')SO_2R''$;

M, independently for each occurrence, represents a substituted or unsubstituted methylene group, NR'', O, S, S(O), or $S(O_2)$;

n represents an integer from 1-7 when present in B, from 0-6 when present in R_5, and from 1-3 when present in R_6; and

Q represents a substituted or unsubstituted: tertiary amino substituent or nitrogen-containing heterocycle.

12. A compound of claim 11, wherein R_8 represents substituted or unsubstituted morpholino, piperazinyl, or cyclohexyl.

13. A compound of claim 11, wherein R'' represents H.

14. A compound of claim 11, wherein R_6 represents M_nQ.

15. A compound of claim 14, wherein the occurrence of M attached to Q represents CH_2, $S(O_2)$, C(=S), or C(=O).

16. A compound of claim 15, wherein the occurrence of M attached to Q is C(=O).

17. A compound of claim 15, wherein the occurrence of M attached to Q represents CH_2.

18. A compound of claim 14, wherein the occurrence of M attached to Q represents substituted NR''.

19. A compound of claim 14, wherein Q represents a substituted or unsubstituted tertiary amino substituent.

20. A compound of claim 14, wherein Q represents a substituted or unsubstituted nitrogen-containing heterocycle.

21. A compound of any of claims 1, 7, 9 and 11, wherein substituents include, independently for each occurrence, alkyl, oxo, acyl amino, hydroxyl, carbonyl, sulfonyl, ester, amide, NR'', hydroxy alkyl, alkoxy alkyl, aryl, heterocyclyl, cycloalkyl, or oligo(ethylene glycol).

22. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound of any of claims 1, 7, 9 and 11.

23. A method of treating a hyperproliferative disorder, comprising administering to an animal a compound of any of claims 1, 7, 9 and 11.

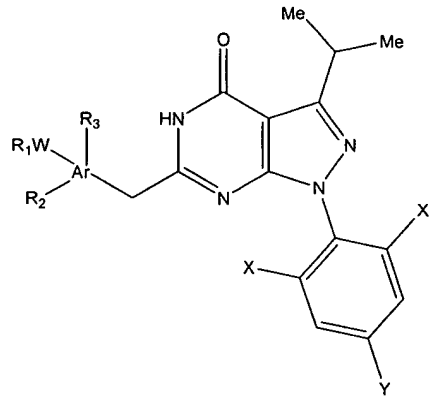
24. A method of inhibiting proliferation of a cell, comprising contacting the cell with a compound of any of claims 1, 7, 9 and 11.

25. A method of treating a viral infection, comprising administering to a mammal a compound of any of claims 1, 7, 9 and 11.

26. The method of claim 25, wherein the viral infection is caused by a human immunodeficiency virus (HIV).

27. A method for the treatment or prevention of alopecia induced by chemotherapy or radiation therapy, comprising administering to a mammal a compound of any of claims 1, 7, 9, and 11 conjointly with one or more chemotherapeutics or radiation therapy.

28. A compound, or an isomeric, prodrug, tautomeric, pharmaceutically acceptable salt, N-oxide, or stereoisomeric form thereof, having a structure of Formula I:



wherein

Ar represents an aryl or heteroaryl ring;

W represents O, S, or NR'';

X represents, independently for each occurrence, methyl or halogen;

Y represents H, X, or a sulfonamide;

R' represents, independently for each occurrence, H, lower alkyl, or a metal counterion;

R'' represents, independently for each occurrence, H or lower alkyl;

R_1 represents H, P(=O)(OR')$_2$, or M_nQ;

R_2 represents H, OH, or M_nQ, wherein one and only one of R_1 and R_2 represents H;

R_3 represents from 0 to 3 substituents on the ring to which it is attached, selected from halogen, lower alkyl, lower alkoxy, hydroxyl, and N(R'')$_2$;

M, independently for each occurrence, represents a substituted or unsubstituted methylene group (including C(=S) and C(=O)), NR'', O, S, S(O), or S(O_2);

n represents an integer from 1 to 5; and

Q represents a substituted or unsubstituted: tertiary amino substituent or nitrogen-containing heterocycle.

29. A compound of claim 28, wherein Q represents a substituted or unsubstituted nitrogen-containing heterocycle.

30. The compound of claim 28, wherein R_1W and R_2 are ortho to each other on Ar but are not ortho to the methylene substituent attached to the bicyclic core.

31. The compound of claim 28, wherein Ar represents a heteroaryl ring.

32. The compound of claim 27, wherein R_3 represents 1-3 substituents on the ring to which it is attached.

33. The compound of claim 28, wherein Y represents $S(O_2)N(R'''')_2$, wherein R'''' represents, independently for each occurrence, H, lower alkoxyl, or lower alkyl.

34. The compound of claim 33, wherein both occurrences of R'''' taken together with N form a substituted or unsubstituted nitrogen-containing heterocycle.

35. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound of claim 28.

36. A method of treating a hyperproliferative disorder, comprising administering to an animal a compound of claim 28.

37. A method of inhibiting proliferation of a cell, comprising contacting the cell with a compound of claim 28.

38. A method of treating a viral infection, comprising administering to a mammal a compound claim 28.

39. The method of claim 38, wherein the viral infection is caused by a human immunodeficiency virus (HIV).

40. A method for the treatment or prevention of alopecia induced by chemotherapy or radiation therapy, comprising administering to a mammal a compound of claim 28 conjointly with one or more chemotherapeutics or radiation therapy.

41. The use of a compound of claim 1, 11, or 28 for the manufacture of a medicament.